State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

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10/11/94
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Refer to: L1630200005 -- St. Clair County
Sauget Sites (Area 1) -- Sauget
Superfund/General Correspondence

OCT 11 1994

The Honorable Jay C. Hoffman
State Representative - 112th District
801 West Main Street
Collinsville, Illinois 62234

Dear Representative Hoffman:

This is in reference to your letter of September 24, 1994 and our earlier conference call. The concerns that yourself and John Baricevic have expressed are issues that the IEPA has been dealing with since the discovery of environmental problems at Dead Creek.

The best source of general information on Dead Creek is a report prepared for IEPA entitled, "Expanded Site Investigation - Dead Creek Project Sites". It was completed in May of 1988 as a $1.3 million state-funded study to provide a comprehensive database of information that would be used in the process to name the Dead Creek Sites to the "Superfund List". Since this document contains some one thousand pages, we are providing you with a site-by-site summary shown below. This report should still be available for review at the Cahokia Public Library, however we can provide you with a copy if so requested.

The Sauget Area 1 Sites comprise three hazardous waste disposal landfills, a formerly used waste impoundment, two abandoned gravel pits and five intermittent segments of Dead Creek (see attached map). These sites had allegedly received hazardous materials and wastes from local industries that became established in this area around the turn of the century. The primary disposal methods included direct industrial wastewater discharges into the five identified segments of Dead Creek and controlled/uncontrolled disposal at the other six sites. Contaminants found at the Sauget Area 1 Sites consist of chlorobenzene, chlorophenol, chloroaniline, nitrophenol, nitroaniline, naphthalene, polychlorinated biphenyls (PCBs) and polynuclear aromatics (PNAs). These sites were aggregated together on the basis of their relative proximity to each other, shared watershed, nearly identical contaminants, and a common property owner at many of the sites during the periods of disposal. Provided below is a brief description of each site:

Site G

A former surface/subsurface hazardous waste disposal site which was originally used as a gravel pit. Site G occupies about 4.5 acres and is littered with demolition debris, metal wastes and corroded drums. Oily and tar-like wastes are found mainly in areas where drums are present; however, most of the landfill is only partially covered with fly ash and cinders. IEPA estimates that there is approximately 22,000 yd^3 of contaminated fill and about 60,000 yd^3 of saturated chemical waste materials. Surface soil sampling revealed PCBs, dichlorobenzene, pentachlorophenol (PCP), nitrophenol, nitroaniline and PNAs. The primary contaminants detected in subsurface soils included naphthalene, PCP and chloroaniline. Access to the site is restricted by a chain-link fence installed by USEPA. Aerial photos show major disposal activities occurring at Site G from the early to mid-1950s to the mid-1960s, after which sporadic disposal occurred until it was fenced in 1982.

On a more recent note, IEPA was informed that an underground fire began at this site in early April and continued through June of this year. IEPA assisted USEPA last June in a sampling event in and around Site G. As would be expected in a scenario of burning PCBs and other chlorophenol, the sample results indicated widespread dioxin contamination on the site and just outside the perimeter of the fence. It is not known when or what type of removal or remedial action will be taken at this site. As it is suspected that the sediments of the low-lying area to the south of Site G are contaminated, both IEPA and IDPH plan to sample this area at the end of this month.

Site H/I

Both Site H and Site I are former gravel pits. Site H is about 5 acres and is completely covered with fly ash and cinders while Site I, having similar cover materials and being completely covered, is approximately 55 acres. Aerial photos indicate that waste disposal at these sites began prior to 1937 and continued until the mid to late-1950s. IEPA estimates the volume of fill material at both sites to be about 116,000 yd^3 and saturated chemical waste material at about 250,000 yd^3. Predominant contaminants found at Site H include PCBs, dichlorobenzene, trichlorobenzene, naphthalene, nitroaniline and PNAs. Site I had similar contaminants but at lower concentrations with the exception of trichlorobenzene and cyanide. Access to Site H is completely unrestricted, however waste materials are not present at the surface as they are at Site G. Access at Site I is restricted by a chain-link fence and a 24 hour guard at both entrances to the business which owns the site.

Site L

This site is the location of a former surface impoundment used by a local hazardous waste hauling firm. It is approximately 70 feet by 150 feet and about 8 feet deep. The site is mostly covered with cinders and access is not restricted. The main contaminants at Site L consist of PCBs, chloroaniline and PNAs.

Site M

Site M is a formerly used gravel pit that was excavated sometime in the 1940s. IEPA is not aware of any active waste disposal at this site. However, given Site M's location near Dead Creek and the fact that the bottom elevation of the pit is lower than that of the creek, most of the contamination at this site can be attributed to creek sediment being passively transported from Dead Creek. The principle contaminants at Site M included PCBs and dichlorobenzene. The Monsanto Company has performed most of investigatory work at this site. Monsanto determined that the volume of sediment from Dead Creek migrating into Site M is on the order of 3,600 yd^3. Access to this site is restricted by a chain-link fence installed by USEPA in 1982. The probability that persons could come into contact with PCB-contaminated sediments is low considering the contaminated sediment is always under water.

Site N

Another site located next to Dead Creek, Site N was a 10-foot deep excavation owned and operated by a construction company. The site was evidently used for the disposal of construction and demolition debris. Two soil borings have shown PNA contamination, however the main group of chemicals found at other Area 1 sites were not found at Site N. Access at Site N is restricted by a chain-link fence.

Dead Creek Segment A

Located next to Site I, this portion of Dead Creek is owned by Cerro Copper Products, Inc. As the culvert at the south end of Dead Creek Segment A (CS-A) had been blocked, this site behaved as an impoundment. It was used as a surcharge basin for the Village of Sauget sewer system during storm events. Given that most of the users in the system were industries, this site evidently received a large volume of industrial process wastewater. Many of the contaminants found at this site were of the same nature as those found at other Sauget Area 1 Sites. As part of a consent decree with the State of Illinois, Cerro Copper agreed to remove approximately 25,000 yd^3 of contaminated creek sediment from CS-A in 1990 at the cost of over $12 million. Work was performed under IEPA oversight and CS-A was backfilled and regraded after the removal was complete. A vapor barrier was placed beneath the final regrade to inhibit airborne compounds coming from groundwater flowing through Site I.

Dead Creek Segment B

As in the case with the above site, the culvert at the south end of Dead Creek Segment B (CS-B) was sealed, also causing this site to behave as an impoundment. CS-B received the same wastewater flows from the Sauget industries prior to the sealing of the culvert at the south end of CS-A. CS-B also received direct wastewater flows from a rubber recycling operation, the hazardous waste hauling firm that operated at Site L and from overflows from Site L when it was in use. Currently, CS-B receives surface runoff from Site G. The main contaminants found in sediments at this site include PCBs, dichlorobenzene and minor amounts of PNAs, naphthalene and chlorobenzene. Access to this site is restricted by a chain-link fence installed by USEPA. Additional sediment sampling by the Monsanto Company has further verified that creek sediments have been impacted by PCBs. Sampling by IEPA has shown that surface water in CS-B is affected by contaminants from Site G.

Dead Creek Segments C, D, E

These segments of Dead Creek received the same industrial flows from the Sauget industries and sources mentioned above prior to the culverts being blocked at CS-A and CS-B. Because these blocking actions had occurred long ago, many of the contaminants which IEPA suspects should be present have since disappeared. Presently, the main contaminants of concern in these creek segments are PCBs. Very limited sampling has revealed total PCB concentrations of up to 60 parts per million (ppm). These segments of Dead Creek run through residential areas of Cahokia and access to them is unrestricted.

IEPA is not aware of recent disposal activities at any of the Sauget Area 1 Sites. Currently, the most significant problems associated with these sites is exposure to dioxins and other contaminants from Site G, unfenced portions of Dead Creek where exposures to PCBs are possible and future potential flooding at Dead Creek. Since it has been established that Site G is affecting surface water quality in the creek, residents along Dead Creek downstream of the fenced areas could be exposed to these contaminants since a culvert designed to alleviate flooding at CS-B has been recently installed.

IEPA is intent on placing the Sauget Area 1 Sites on the "Superfund List". Comments on the draft scoring package were sent to USEPA late last year. We anticipate that the scoring package can be finalized shortly so that these sites are eligible for the Spring of 1995 proposed listing update.

Our recommendations to USEPA on what immediate measures need to be taken at the Sauget Area 1 Sites are listed below:

1. Perform an emergency removal or remedial action at Site G to minimize or eliminate the health risks associated with airborne contaminants and exposures to dioxin-contaminated soils.

2. Fully characterize the extent of contamination in the unfenced portions of Dead Creek (CS-C, CS-D, CS-E). As very limited data suggest, known concentrations of PCBs, while significant, would not be expected to result in acute health problems for children playing in creek sediments. IEPA has recommended that fencing be constructed around creek segments showing PCB concentrations that could cause acute health problems if full-scale remedial activities (e.g., removal actions) are not expected to be completed within the next few years.

3. Repair or fortify the fences that were installed around Site G, CS-B and Site M to minimize the risk of persons coming into contact with these sites. There is a small access point to the southern portion of CS-B that needs to be blocked.

USEPA is in the process of analyzing these recommendations and I will let you know if I hear anything positive. In the meanwhile, if you or Mr. Baricevic have further questions or concerns about these sites, please do not hesitate to call.

Sincerely,

Tom Walters
Legislative Liason
Director's Office
Illinois Environmental Protection Agency

Attachment - Sauget Area 1 Sites map

cc: Terry Ayers
Paul Takacs
Larry Eastep
Division File

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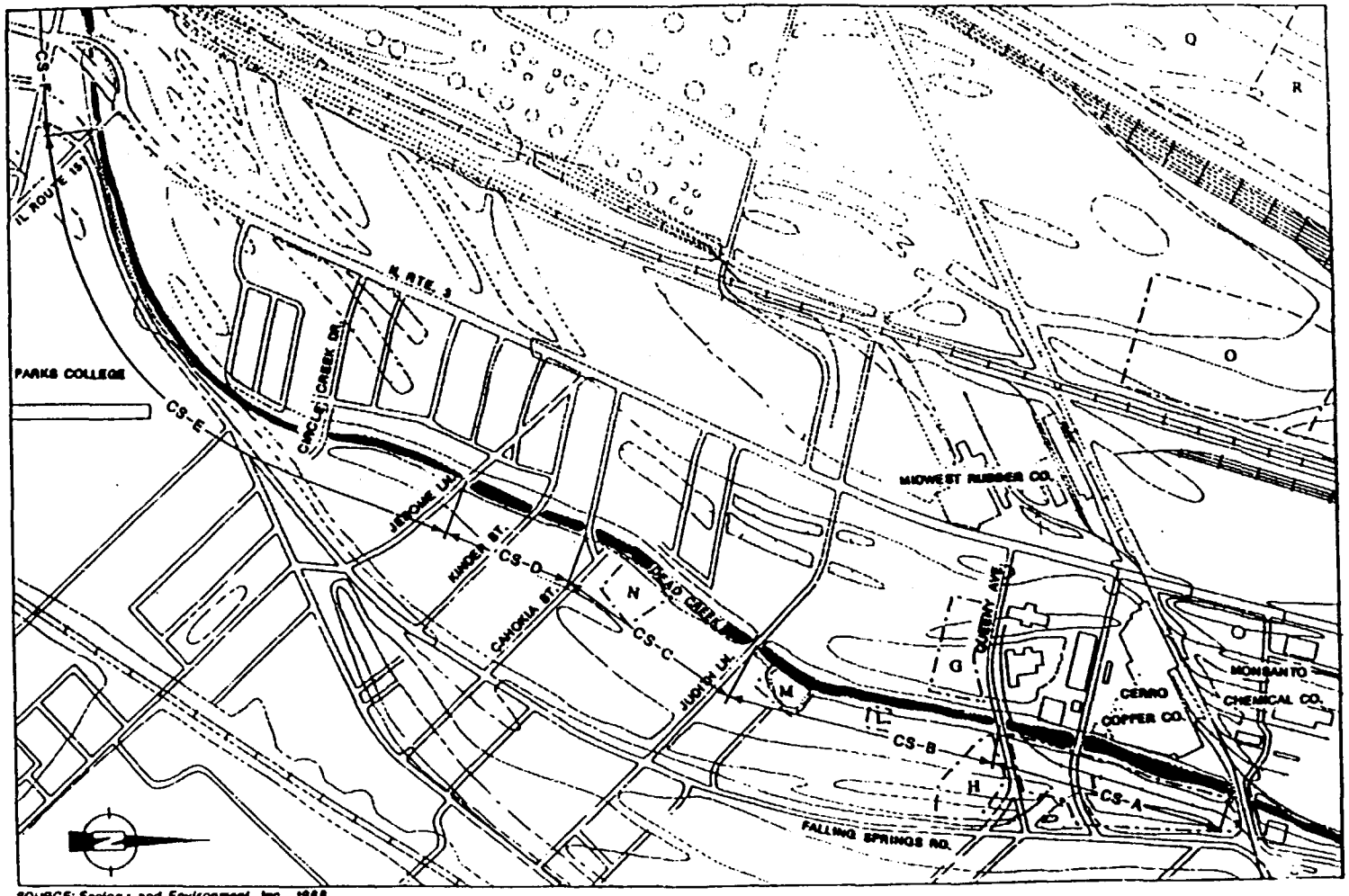

SOURCE: Ecology and Environment, Inc., 1988.

SCALE
0 1000 2000 3000 4000 5000 FEET

FIGURE 2-11 SITE FEATURES MAP, DEAD CREEK